

## Field Notes

*In an effort to share some of the natural history observations made during the bottom trawl survey, we have requested that the Chief Scientists on each part of the cruise comment on some of the more interesting catches that were brought aboard the NOAA Ship ALBATROSS IV.*

### Spring Weather

An unusually good stretch of weather for this time of year allowed the Spring Bottom Trawl Survey to finish early. Leg I, which was seventeen days long, completed 175 stations from Long Island to Cape Hatteras. The second leg picked up stations south of Nantucket, completed all of George's Bank and the Great South Channel, as well as a handful of Gulf of Maine Stations – totaling 100 stations in twelve days. The third leg occupied 69 stations in the Gulf of Maine in record time and allowed the entire Spring Bottom Trawl Survey to be completed one week ahead of schedule. We used some of this extra time to add additional random stations in the Western Gulf of Maine, an area of continuing stakeholder concern in terms of survey performance. These extra stations can be expected to improve the precision of the survey indices in this area.

### An Historical First

The highlight of the first leg was the capture of a lionfish (*Pterois sp*) just south of Cape Hatteras. Although lionfish have been showing up along the east coast quite regularly over the past decade or so, this was the first time we have encountered one during our forty three years of surveying the Atlantic seaboard. Native to the Indo-Pacific, lionfish were likely introduced off of the southeastern U.S. in the early 90's, possibly through the aquarium trade. They are best known for their long spines that can deliver toxins powerful enough to pose a serious health risk to humans. The specimen was sent to the Smithsonian museum and included in their reference collection.

### Super Sized Catches

The second leg brought in two record catches. The first, at station 212, had 147 barndoor skates that weighed in at 1,304 pounds. Their total lengths ranged from 19 to 53 inches. This is triple the number of the next largest catch of barndoors, which occurred on the 2004 winter survey. It is five and a half times the third largest catch captured on the 2002 winter survey. This one catch had almost three times the total number of individuals caught between 1975 and 1990! During that time the catches of barndoor skates were extremely low. Since then, a significant increase in the number of individuals caught has been observed during our surveys. This record barndoor skate catch was exciting for all onboard, even more so for those who remember a time when it was rare to see even one barndoor during a survey.

Another record tow occurred at station 241 where we captured the largest Atlantic soft pout catch in survey history. 1,281 individuals weighed in at 4.4 pounds. This was almost double the second largest catch, which occurred in 1980. These small fish are eel-like in shape. They only reach a maximum length of six inches and they have soft, loose, translucent skin without scales. They typically inhabit deep water (1200-1800 feet) but are found shallower in the northern part of their range (New Brunswick, Canada). Our

survey regularly catches Atlantic soft pout, however it is unusual to see more than a handful of them at one time.

### **More Halibut and Young Cod**

During Leg III of the spring survey, there were two significant observations. This year Atlantic halibut were observed during fifteen different trawl hauls. Over the past five years (2001 to 2005), the highest number of tows with halibut catches was nine which occurred in 2003 and 2005. The lowest number of halibut caught was three in 2004. Also for the first time Atlantic halibut were observed on southeast Georges Bank and in the Great South Channel.

The second significant event was a catch of 890 juvenile Atlantic cod measuring two inches or less in Cape Cod Bay just south of Plymouth Harbor. Although age 0+ indices are generally less reliable than indices of older age classes in predicting future cod recruitment in the Gulf of Maine, observing large numbers of young individuals provides some hope that cod reproduction may be improving in this area. Unfortunately, as in this past fall's survey, large catches of adult Atlantic cod and Acadian redfish were noticeably missing.

Pete Chase  
Chief Scientist  
Survey Part I  
508-495-2348  
[Peter.Chase@noaa.gov](mailto:Peter.Chase@noaa.gov)

Stacy Rowe  
Chief Scientist  
Survey Part II  
508-495-2021  
[Stacy.Rowe@noaa.gov](mailto:Stacy.Rowe@noaa.gov)

Larry Brady  
Chief Scientist  
Survey Part III  
508-495-2145  
[Larry.Brady@noaa.gov](mailto:Larry.Brady@noaa.gov)